

Advisory Circular

INSTRUCTIONS FOR COMPLETION OF FAA FORM 337 (OMB NO. 21200-000220), MAJOR REPAIR AND ALTERATION (AIRFRAME, POWERPLANT, PROPELLER, OR APPLIANCE)

Date: 5/21/87 AC No: 43.9-1E Initiated by: MRS3340

Charge:

1. PURPOSE. This advisory circular (AC) provides instructions for ebmpleting Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).

- 2. CANCELLIATION. AC 43.9-ID. Instructions for Completion of FAA Form 337 (OMB 64-RROG60), Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), dated 9/5/79, is canceled.
- 3. RELATED FEDERAL AVIATION REGULATIONS (FAR) SECTIONS. FAR Part 43. Sections 43.5, 43.7, 43.9, and Appendix B.
- 4. INFORMATION. FAA Form 337 is furnished free of charge amddiss available at all FAA Air Carrier (ACDO), General Aviation (GADO), Manufacturing Inspection (MIDO), and Flight Standards (FSDO) district offices, and at all International Field Offices (IFO). The form serves two main purposes; one is to provide aircraft owners and operators with a record of major repairs' or alterations indicating details and approval, and the other is to provide the FAA with a copy of the form for inclusion in the aircraft records at the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma.
- 5. INSTRUCTIONS FOR COMPLETING FAA FORM 337. The person who performs or supervisses a major repair or major alteration should prepare FAA Form 3371 The form is executed at least in duplicate and is used to record major repairs and major alterations made to an aircraft, an airframe, **powerplant**. propeller, appliance, or spare part. The following instructions apply to corresponding items 1 through 8 of the form as illustrated in Appendix 11
- Item 1 Aircraft. Information to complete the "Make," "Model," and "Serial Number" blocks will be found on the aircraft manufacturer's identification plate. The "Nationality and Registration Mark" is the same as shown on AG Form 8050-3, Certificate of Aircraft Registration.
- Enter the aircraft owner's complete name and b. Item 2 - Owner. address as shown on AC Form 8050-3.

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Note: When a major repair or alteration is made to a **spare part** or appliance, items 1 and 2 will be left blank, and the original and duplicate copy of the form will remain with the part until such time as it is installed on an aircraft. The person installing, the part will then enter the required information in blocks 1 and 2, give the original of the form to the aircraft owner/operator, and forward the duplicate copy to the local FAA district office within 48 hours after the work is inspected.

- c. Item 3 For FAA Use Only. Approval may be indicated in **Item 3** when the FAA determines that data to be used in performing a major alteration or a major repair complies with accepted industry practices and all applicable FAR. Approval is indicated **im come** of the following methods. (See paragraph **6b** for further details.)
- (1) Approval by examination of data enly one aircraft only:
 "The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."
- (2) Approval by physical inspection, demonstration, testing, etc., of the data and aircraft one aircraft only: "The alteration (or repair) identified herein -complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."
- (3) Approval by examination of data only duplication on identical aircraft. "The alteration identified herein complies with the applicable airworthiness requirements and is approved for deplication on identical aircraft make, model, and altered configuration by the original modifier."
- d. $\frac{4 \text{Unit Identification}}{\text{Identification}}$. The information blocks under item 4 are used to identify the airframe, powerplant, propeller, or appliance repaired or altered. It is only necessary to complete the blocks for the unit repaired or altered.
- e. Item **5 Trype**. Enter a **checkmark** in the appropriate **column** to indicate if the unit was repaired or altered,
 - f. Item 6 Conformity Statement.
- (1) "A"- Agency"s Name and Address. Enter name of the mechanic, repair station, or manufacturer accomplishing the repair or alteration. Mechanics should enter their name and permanent mailing address. Manukfacturers and repair stations should enter the name and address under which they do business.
- (2) "B" Kind of Agency. Check the appropriate box to indicate the type of person or organization who performed the work.

- (3) "C" Certificate Number. Mechanics should enter their mechanic certificate number in this block, e.g., 1305888. Repair stations should enter their air agency certificate number and the rating or ratings under which the work was performed, e.g., 1234, Airframe Class 3. Manufacturers should enter their type production or Supplemental Type Certificate (STC) number. Manufacturers of Technical Standard Orders (TSO) appliances altering these appliances should enter the TSO number of the appliance altered.
- (4) Di Compliance Statement: This space is used to certify that the repair or alteration was made in accordance with the FAR. When work was performed or supervised by certificated mechanics not employed by a manufacturer or repair station, they should enter the date the repair or alteration was completed and sign their full name. Repair stations are permitted to authorize persons in their employ to date and sign this conformity statement.
- g. Item 7 Approval for Return to Service. FAR Part 43 establishes the cachiditions under which major repairs or alterations to airframes, powerplants, propellers, and/or appliances may be approved for return to service. This portion of the form is used to indicate approval or rejection of the repair or alteration of the unit involved and to identify the person or agency making the airworthiness inspection. Check the "approved" or "rejected" box to indicate the finding. Additionally, check the appropriate' box to indicate who made the finding. Use the box labeled "other" to indicate a finding by a person other than those listed. Enter the date the finding was made. The authorized person who made the finding should sign the form and enter the appropriate certificate or designation number.
- h Item 8 Description of Work Accomplished. A clear, concise, and legible statement describing the work accomplished- **should** be entered in item 8 on the reverse side of FM Form 337. It is important that the 1. location of the repair or alteration, relative to the- aircraft or component, be described. The approved data used as the basis for approving the major repair or alteration for return to service should be identified and described in this area.
- (1) For example, if a repair was made to a buckled spar, the. description entered in this part might begin by stating, "Removed wing from aircraft and removed skin from outer 6 feet. Repaired buckled spar 49 inches from tip in accordance with " and continue with a description of the repair. The description should refer to applicable FAR sections and to the FAA-approved data used to substantiate the airworthiness of the repair or alteration. If the repair or alteration is subject to

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being covered by skin or other structure, a statement should be made certifying that a **precower** inspection was made and that covered areas were found satisfactory.

- alterations for return to service most be FAA-approved prior to its use for that purpose and includes: FAR (e.g., airworthiness directives), AC's (e.g., AC 43.10-11A under certain circumstances), TSO's parts manufacturing approval (PPA), FAA-approved manufacturer's instructions, kits and service handbooks, type certificate data sheets, and aircraft speciffications. Other forms of approved data would be those approved by a designated engineering representative (DER), a manufacturer holding a delegation option authorization (DOA), STC's, and, with certain limitations, previous FM field approvals. Supporting data such as stress analyses, test reports, sketches, or photographs should be submitted with the FAA Form 337. These supporting data will be returned to the applicant by the local FAA district office since only FM Form 337 is retained as a part of the aircraft records at Oklahema City.
- (3) If additional space is needed to describe the repair or alteration, attach sheets bearing the aircraft nationality and registration mark and the date work was completed.
- (4) Showing weight and balance computations under this item is not required; however, it may be done. In all cases where weight and balance of the aircraft are affected, the changes should be entered in the aircraft weight and balance records with the date, signature, and reference to the work performed on the FAA Form 337 that required the changes.
- **6.AMMINISTRATIVE** PROCESSING. At least an original and one duplicate copy of the FAA Form **337 will** be executed. **FAA** district office processing of the **forms** and their supporting data will depend upon whether previously approved or non-previously approved data was used as follows:
- a. Previously Approved Data. The forms will be completed as instructed in this AC ensuring that item 7, "Approval for Return to Service,' has been properly executed. 'Give the original of the form to the aircraft owner or operator, and send the duplicate copy to the local FAA district office within 48 hours after the work is inspected.
- b. Non-previously Approved Data. The forms will be 'completed as imputational in this AC, leaving item 7, "Approval for Return to Service," blank. Both copies of the form, with supporting data, will be sent to the local FAA district office. When the FAA determines that the major repair or alteration data complies with applicable regulations and is in conformity with accepted industry practices, data approval will be recorded by entering an appropriate statement in item 3, "For FAA Use Only." Both forms and supporting data will be returned to the applicant who will complete item 7, "Approval for Return to Service." The applicant will give the original of the-form, with its supporting data, to the aircraft owner or operator and return the duplicate copy to the local FAA district office who will, in turn, forward it to the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma, for inclusion in the aircraft records.

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c. Signatures on FAA Form 337 have limited purposes:

(1) A signature in item 3, "For FAA Use Only," indicates approval of the data described in that section for use in accomplishing the work described under item 8 on the reverse of FAA Form 337.

(2) A signature in item 6, "Conformity Statement," is a certification by the person performing the work that it was accomplished in accordance with applicable FAR and FAAkapproved data. The certification is only applicable to that work described under item 8 on the reverse of FAA Form 337.

Note: Neither of these signatures (subparagraph c(1) and c(2)) indicate FAA approval of the work described under item 8 for return to service.

- (3) A signature in item 7, "Approval for Return to Service," does not signiffy FAA approval unless the box to the left of "FAA Flight Standards Inspector" or "FAA Designee" is checked. The other persons listed in item 7, are authorized to "approve for return to service" if the repair or alteration is accomplished using FM-approved data, is performed in accordance with applicable FAR, and found to conform.
- d. FAA Form 337 is not authorized for use on other than U.S.-registered authority. If a foreign civil air authority requests the form, as a record of work performed, it may be provided. The form should be executed in accordance with the FAR and this AC. The foreign authority should be notified on the form that it is not an official record and that it will not be recorded by the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma.
 - e. FAR Part 43, Appendix B, Paragraph (b) authorizes FAA certificated repair stations to use a work order, in lieu of FAA Form 337, for only major repairs. Such work orders should contain all the information provided on the form and in no less detail; that is, the data used as a basis of appiroval should be identified, a certification that the work was accomplished using that data and in accordance with the FAR, a description of the work performed (as required in item 8 of the FAA Form 337), and approval for return to service must be indicated by an authorized person. Signature, kind of certificate, and certificate number must also appear in the record (reference FAR Section 43.9).

Killiaam T. Bkenman

Acting Director cf Flight Standards



APPENDIX 1. FAA FORM 337 (FRONT), MAJOR REPAIR AND ALTERATION ((APRIFRAME, POWERPLANT, PROPELLER, OR APPLIANCE)

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FM Formââ7 (****),

FAA FORM 337 (BACK), MAJOR REPAIR AND ALTERATION (ALREPAIR, POWERBLANT, PROPELLER, ORRAPPHENCE)

NOTICE

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8. Description of Work Accomplished

(If more space is required, attach additional sheets, identify with aircraft nationality and registration mark and date work completed.)

1.. Removed right wing fixon aircraft and removed skin fixon outer 6 feet. Repaired buckled spar 49 in &es fixon tip in accordance with attached photographs and figure 1 of diluting dated March 6, 1987.

DATE: March **15, 1987**, inspected splice in **Item** 1 and found it to be in accordance with data indicated. Splice is **okay** to cover. Inspected internal and external wing assembly for hidden damage and condition.

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Dornald Paulley, A&P 237412 IA

- 2. Primed interior wing structure and replaced skin P/NS 63-0085, 63-40086, and 63-0008788 with same maxterial, 20240-E3, .025 inches thick. Rivet size and spacetime all the same as original and using procedures in Chapter 2, Section 3, of AC 43.13-1A, &ted 1972.
- **3.** Replaced stringers as required and installed 6 splices as per attached drawing and photographs.
- 4. Installed wing, ringred aileron, and operationally checked in accordance with manufacturer's maintenance manual.

5. No change in v	weight or	balance. * m
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Additional Sheets Am Attendress